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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,211

02/11/2004

Chen-Feng Wu

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12/06/2004

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EXAMINER

POKER, JENNIFER A

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,211

Applicant(s)

WU ET AL.

Examiner

Jennifer A. Poker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

General Status

1. This is a second action on the merits of amendment received September 1, 2004 of application filed April 2, 2003. Claims 1-11 are pending and are being examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 8, 9, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,847,518 to Ishiwaki in view of Applicant's Own Admitted Prior Art.

Regarding claims 1, 4, and 11, Ishiwaki discloses a transformer comprising:

- (1) two core portions with legs which pass through the hollow portions of the bobbins (abstract; figures 3-5);
- (2) first and second bobbins (figures 3-5; abstract);
- (3) hollow portion openings (total of four hollow openings) located on both sides of the first and second bobbins wherein the core passes through (figures 3-5);
- (4) first and second primary coils (1, 2) located at one hollow end of respective first and second bobbins (figure 3);
- (5) first and second secondary coils (3, 4) located at a second hollow end of respective first and second bobbins (figure 3).

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Ishiwaki discloses the claimed invention except for the core surrounding the bobbins.

Applicant illustrates in prior art (figure 1) that a core has been known in the art to surround a bobbin for the purposes of providing a magnetic circuit.

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Ishiwaki with the teachings of the Applicant's Own Admitted Prior Art and utilize a core that surrounded as well as passed through the bobbins for the purposes of providing a magnetic circuit.

Regarding claim 2, Ishiwaki further illustrates that the first and second bobbins are relatively parallel to one another (figures 3-5).

Regarding claim 3, Ishiwaki further illustrates that the density of the secondary coils (3, 4), which occupy one end of the hollow portion of the first and second bobbins, is greater than the density of the primary coils (11, 12), which occupies another end of the first and second bobbins (figures 3, 8).

Regarding claim 5, Ishiwaki further discloses a flange (8) (a protruding rim) on both first and second bobbins, which, as seen in figure 3, separates the hollow portions and separates the primary and secondary coils of each bobbin (figure 3; column 6, lines 42-43).

Regarding claim 6, Ishiwaki further discloses the use of an insulating casing (20) (figure 13; column 7, lines 62-63).

Regarding claim 7, Ishiwaki further disclose that an insulating resin seals the transformer within the insulating casing. It was understood that his resin would separate the first and second bobbins and could loosely be interpreted as a separation plate when the resin would harden (column 8, lines 2 and 3).

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Regarding claim 8, Ishiwaki further illustrates in figures 3-5 that the first bobbin comprises end portions that engage with end portions of the second bobbins.

Regarding claims 9 and 10, Ishiwaki in view of Applicant's Own Admitted Prior Art discloses the claimed invention except for the specific engagement of the engaging portions (recess and protrusion). Ishiwaki does illustrate the engaging portions are connected. It would have been obvious to one having ordinary skill in the art, at the time the invention was made to utilize any form of connection since applicant has not disclosed that the recesses and protrusions solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any means of connection.

Response to Arguments

4. Applicant's arguments filed September 1, 2004 have been fully considered but they are not persuasive.

In response to applicant's assertion that the Ishiwaki and Applicant's Admitted Prior Art either alone or in combination, fail to teach, disclose, or suggest the features recited by claim 1, examiner respectfully disagrees. Each limitation is addressed and discussed in the above art rejection. Ishiwaki clearly discloses transformer comprising having two core portions with legs which pass through the hollow portions of the bobbins; first and second bobbins; hollow portion openings (total of four hollow openings – two per bobbin) located on both sides of the first and second bobbins wherein the core passes through; first and second primary coils (1, 2) located at one hollow end of respective first and second bobbins; and finally first and second secondary coils (3, 4) located at a second hollow end of respective first and second bobbins. Although Ishiwaki does not

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disclose a core, which surrounds the bobbins, applicant admits that it has been known in the art to surround a bobbin for the purposes of providing a magnetic circuit.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to surround a bobbin for the purposes of providing a magnetic circuit. Ishiwaki may not teach the limitation relating to the core structure passing through and surrounding the bobbins, however the incorporation of a second reference with a motivational statement renders the rejection proper. See above rejection.

Examiner maintains that a prima facie case of obviousness has been established.

Thirdly, applicant argues that none of the cited references recognizes the problem identified by the present application. It is noted that these "problem" features upon which applicant relies, but does not discuss in detail are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further arguments are addressed below:

- (1) objection to the drawings is withdrawn;
- (2) objection to claim 3 is withdrawn;
- (3) rejection under 35 U.S.C. 112, second paragraph, to claims 7 and 10 are withdrawn.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 4:30-3:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
November 24, 2004


LINCOLN DONOVAN
PRIMARY EXAMINER
GROUP 2100